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John E Beck
Xerox Corporation
Xerox Square 20A
Rochester, NY 14644

EXAMINER	
NGUYEN, CAM LINH T	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 17

Application Number: 09/596,070
Filing Date: June 16, 2000
Appellant(s): GLANCE, NATALIE S.

Jeannette M. Walder
For Appellant

EXAMINER'S ANSWER

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the

decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that

- Claims 1 – 3, 5, 8 - 12 do not stand or fall together
- Claim 4 stands alone
- Claim 6 stands alone.
- Claim 7 stands alone.
- Claims 13 – 20 stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,421,717	KLOBA et al	7-2002
6,236,978	TUZHILIN	5-2001

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kloba et al (U.S. 6,421,717) in view of Alexander S. Tuzhilin (U.S. 6,236,978).

♦ As per claim 1, 10, 13, 15,

Kloba teaches a method for generating recommendations comprising:

- "Providing an item of a particular type to a handheld device having an application for engaging a repetitive with item" See fig. 1C, 160E, col. 4 line 64 – col. 5 line 8 of Kloba.
- "An item of a particular type" corresponds to a particular music, images, etc. (col. 7 line 28 – 32, Kloba). A handheld device can be a PDA or handheld computer (See col. 4, table 2, col. 10 line 41 - 50 of Kloba).
- "Engaging in a repetitive user activity with items of a particular type" corresponds to the number of time that user visits a particular Web site for a same content, or listening to a particular song (col. 16, line 64 – col. 17 line 5 of Kloba).
- "The repetitive activity comprises displaying or playing items of the particular type to a user" corresponds to the time when user views a page on the display or listening to a song.

- "Generating a history of user interaction with the provided item" See Fig. 1F1, element 166D, col. 16, line 64 – col. 17 line 23 of Kloba. As noted above, when a user views a web page or listening to a song, it must include "an instance of a user causing the application to display or play the provided item" (See fig. 1C, 160F – 160I of Kloba). "The duration of the display or play" corresponds to the amount of time that user spend with that item.
- "Each user interaction occurs during standalone operation of the handheld device disconnected from a network" corresponds to the period of time that the device off-line (See Fig. 1C, col. 17 line 25 - 29 of Kloba). When a device is off-lined, it is considered as a "standalone operation".
- "Uploading the history of user interactions to a network recommender" See Fig. 1F1, 166E –166F, col.17 line 19 – 23 of Kloba. "A network recommender" corresponds to "the network provider". This provider includes the advertised provider, which considered same as recommender.

Kloba does not clearly disclose how the system transforms the history into an implicit rating of the provided item while providing advertising objects to the user. However, Tuzhilin, on the other hand, discloses a recommendation system that comprises a handheld device (See Fig. 6C, Fig. 7, col. 13 line 8 – 20. Tuzhilin) that tracks user activity (col. 11 line 25 – 29, Tuzhilin); thereby transferring the user history to the server. Further, Tuzhilin teaches:

- "Transforming the history into an implicit rating of the provided item" See Fig. 6a element 140, column 11 line 42 – 52.

- " The rating comprising predicted ratings for a user for a plurality of items not rated by the user, having a measure of confidence in the prediction and a rationale for the prediction" See col. 12 line 4 – 24.
    - "Items not rated by the user" corresponds to "the new line of perfumes"
    - Because this item is new, therefore, it is not rated by this user.
- "Using the implicit rating of the provided item to generate recommendations of other items" See Fig. 6a element 145, column 11 line 53 – column 12 line 3.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Tuzhilin into the system of Kloba in order to provide a recommendation system that works off-line, as well as standalone operation, because the Kloba system provides the benefits of minimizing uses of the internet, greater efficiency, ease of use (col. 5 line 66 – col. 6 line 2, Kloba). Taken together with the benefits from the Tuzhilin system would provide a match between user profiles and the implicit rating. The combination of two systems would have provided an accuracy recommendation system that works better for the users.

♦ As per claim 2, 11 - 12, 20,

- "The device is selected from the group consisting of a personal digital assistant for displaying visual material, an audio player or playing music, and an electronic document viewer" See Table 2 in col. 4, col. 25 line 57 – col. 26 line 6 of Kloba.

♦ As per claim 3, 5, 8, 16 – 19,

- "The history of user interactions is transformed into recency and frequency of interaction". See Fig. 1F1, element 166D, col. 16, line 64 – col. 17 line 23 of Kloba.

♦ As per claim 4, 6 - 7

Referring to Fig. 3 – 5, Tuzhilin teaches how to generate the dynamic profile construction procedure that includes individual rules (column 5 line 1 – column 10 line 45), and the Estimated Purchasing Need Module with match these rules that include the types and time of items to be purchased, with the user's purchasing history (See column 11 line 47 – 53). Therefore, it is clear that the claimed provision is inherent. Nonetheless, to expedite prosecution, even if the limitation of the above were not inherent, it would have been obvious to one with ordinary skill in the art at the time the invention was made to include such a steps in order to rate an item.

♦ As per claim 9, 14,

" Providing a user profile" See Fig. 1 and 2, column 3 line 30 – 50, column 12 line 60 – 65 of Tuzhilin.

(11) Response to Argument

In Appellant's Brief, filed November 20, 2003, Appellant argues four specific points:

1. "Kloba does not teach transforming the history of user interactions into an implicit rating of the provided item."
2. "Tuzhilin does not teach transforming the history into an implicit rating of the provided item, wherein the history of user interactions with the provided item may

be used to create more accurate statistical profiles; Tuzhilin teaches transforming a history of user transactions into rules to be stored as part of a user's profile."

3. "The combination of Kloba and Tuzhilin does not teach or suggest Appellant's invention as claimed in claim 1, 10 or 13. The combination of Kloba and Tuzhilin teaches generating recommendations from a history of user online activities."

4. "The specific relationships for generating ratings as claimed in claims 4, 6-7 are not taught or suggested by Kloba and Tuzhilin."

The Federal Circuit has embraced a theory of prima facie obviousness for use in ex parte prosecution in the PTO. The prima facie case is a procedural tool that, as used in patent examination, means not only that the evidence of the prior art would reasonably allow the conclusion that the examiner seeks, but also that the prior art compels such a conclusion if the Appellant produces no evidence or argument to rebut it. See *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). In the instant case, the prior art compels the conclusion that the claimed invention is unpatentable under 35 U.S.C. §103(a) as set forth in the Final Office Action, mailed June 11, 2003, and reiterated above for convenience.

Each of Appellant's four arguments above fails to rebut the *prima facie* showing of obviousness for the reasons discussed below.

EXAMINER'S RESPONSE TO APPELLANT'S ARGUMENT 1:

Appellant's first argument is unpersuasive because it attempts to show nonobviousness by attacking Kloba alone and nonobviousness cannot be established by attacking references individually. Where the rejection is based upon the teaching of a combination of references, as it is here, each reference must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole. See *In re*

Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As set forth in the June 11, 2003 Final Office Action, the rejection of claims 1 – 20 was made under 35 U.S.C. §103(a) as being unpatentable over the combination of Kloba *et al.* and Tuzhilin; not Kloba *et al.* alone.

Appellant fails to recognize the combination of the two systems that the Examiner provided. Specifically, the Examiner does not use the Kloba reference to teach the "transforming the history of user interactions into an implicit rating of the provided item". Instead, the Examiner provides the teaching of Tuzhilin for the "transforming the history of user interactions into an implicit rating of the provided item," which was then applied to the system of Kloba.

EXAMINER'S RESPONSE TO APPELLANT'S ARGUMENT 2:

Appellant's second argument is unpersuasive for two reasons. First, this argument, like the previous one, attempts to show nonobviousness by attacking the references individually, whereas the rejection was made over a combination of references. Specifically, Appellant attacks Tuzhilin alone, but the rejection of Claims 1-20 was made over the combination of Kloba and Tuzhilin. The Examiner notes, where the rejection is based upon the teaching of a combination of references, as it is here, each reference must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole. See *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Second, the Examiner disagrees with Appellant's description of Tuzhilin and its relationship to the claimed invention. Contrary to Appellant's assertions, Tuzhilin's

method, like that of the Appellant, is based on "repetitive user activity" with provided items. Specifically, the transactions[1] in Tuzhilin are repetitive user activities by definition. For example, the transactions described in Tuzhilin involve two parties, *i.e.,* a user and a remote server containing the content of a web site visited by the user. The activities (or transactions) between the user and server are recorded in what Tuzhilin refers to as a "dynamic profile." This "profile" is stored in the Purchasing History storage, which includes all activities (transactions) or details that transpire between the user and the "web site visited."

Once the "dynamic profile" is created for a User's session, Tuzhilin then creates rules based on the "profile," which are subsequently used to predict specific User needs. For example, the Tuzhilin records such activities of a user such as how much time she spends on a particular web site, how <u>often</u> she buys specific items or classes of items, and then creates a rule set that estimates future needs of the specific user. At Col. 11 lines 25 – 29, Tuzhilin teaches that the system can generate a rule such as "the user <u>often</u> buys perfumes in Paris". Furthermore, the word "often" is synonymous with "repetitive activity." Therefore, Tuzhilin's transactions are in fact repetitive user activities. And, the relationship between "perfume" and "Paris" corresponds to the "implicit rating." Therefore, the Tuzhilin reference teaches an "implicit rating" by this relationship.

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[1] According to Merriam-Webster's Collegiate dictionary, Tenth edition, a "transaction" is defined as "a communicative action or activity involving two parties or things that reciprocally affect or influence each other."

In addition, Appellant fails to recognize that the Examiner has provided a combination of two systems (Kobla and Tuzhilin), as opposed to reliance on Tuzhilin alone. Also, the Examiner has established a prima facie case of what these two references would have led one of ordinary skill in the art to create at the time of the invention. Specifically, the Examiner did not use the Tuzhilin reference to teach the "repetitive user activity," nor the "standalone operation." Instead, the Examiner relied on Kloba for these teachings, i.e. "repetitive user activity" and "standalone operation." As the Examiner set forth in her prima facie case of obviousness, the Kloba reference teaches that the user's behavior is tracked and recorded (see col. 16 lines 63 – col. 17 lines 10, Kloba) while accessing remote websites. The "repetitive user activity," as set forth in the Final Action, corresponds to "the number of times" that the user has viewed a given page, or listened to a specific song. This teaching reads on Appellant's step of "recording repetitive user activity, such as how often and when the user listens to the CD." (See paragraph #2 of Appellant's Appeal Brief.) Furthermore, Kloba teaches the "repetitive user activity" in a "standalone operation" when a user performs operations in an off-line mode at column 15, lines 48 – 50.

The Appellant argues, "Tuzhilin teaches away from Applicant's method, because, as argued by Tuzhilin, the number of transactions for a user can be too small to have any statistical significance." In response, the Examiner disagrees. The cited excerpt of column 4, lines 32-36 of Tuzhilin is merely an exception, not the manner that the Tuzhilin system typically works in. The Appellant has extrapolated a hint at some exceptional case by Tuzhilin into a conclusion that the Tuzhilin reference teaches away

from the claimed method. This is misplaced for two reasons. First, the rejection was made under a combination of Kloba and Tuzhilin and what they would have meant to the ordinary skilled artisan. And, second, that this is a mere exception that may take place and not the general methodology that the Tuzhilin system works by.

Hence, Appellant's arguments are unpersuasive and the combination of Kloba and Tuzhilin meets all of the claimed provisions as set forth in the Final Office Action.

EXAMINER'S RESPONSE TO APPELLANT'S ARGUMENT 3:

Appellant's third argument is unpersuasive for two reasons. First, this argument, like the previous one, attempts to show nonobviousness by attacking the references individually, whereas the rejection was made over a combination of references. Specifically, Appellant attacks Tuzhilin alone, but the rejection of Claims 1-20 was made over the combination of Kloba and Tuzhilin. The Examiner notes, where the rejection is based upon the teaching of a combination of references, as it is here, each reference must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole. See *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Second, the Examiner relied on Kloba as the base system, including the step of recording activities in both an on-line and off-line modes. Whereas, the Examiner relied on the Tuzhilin reference for its teaching of generating a recommendation based on a user's activities.

As previously made of record (e.g., Final Office Action), Kloba discloses a method of downloading web content on a mobile device, and allowing a user of the mobile device to operate and interact with the web content in both on-line and off-line

modes. See the abstract, Kloba. Kloba further discloses tracking and recording the user's behaviors when interacting with the web content. See col. 16 lines 63 – col. 17 lines 10, Kloba. Kloba then discloses transmitting the tracked information to the server (see col. 17 lines 19 – 20, Kloba). Upon receiving the tracking information, the server then assesses the state information pre-emptively prepared and sends down customized information to the user (col. 21 lines 38 – 41, Kloba). Then Kloba uses a notification module to send objects to the user without any prior explicit request from user (col. 10 lines 13 – 17). Clearly, the server reacts and customizes information forwarded to the user based on the received transaction history of the user's activities. Hence, the combination of Kloba and Tuzhilin would have provided an accuracy recommendation system that works better for the users, as set forth in the Final Action, and which in turn reads on the claimed invention.

The Appellant argues, "Kloba does not indicate what a provider may do with the tracked information." The Examiner disagrees. As described in the previous paragraph above, the server in Kloba actually uses the user-transaction history to customize information that is then forwarded that user.

In the same section of the Brief, the Appellant proceeds to argue, "Tuzhilin teaches recording online transactions and generating purchasing profiles and recommendations from those online transactions. There is no recognition in Tuzhilin of the value of recording offline activities." Again, the rejection was made over the combination of Kloba and Tuzhilin, and not Tuzhilin alone. The combination of Kloba and Tuzhilin does in fact teach such a feature as established on record. The Examiner

notes, where the rejection is based upon the teaching of a combination of references, as it is here, each reference must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole. See *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The Appellant then argues, "[t]he combination of Kloba and Tuzhilin teaches one skilled in the art to generate recommendations and user profiles based on the 'online transactions' engaged in by a user of Kloba's system." The Examiner disagrees. Specifically, the combination would track both online and offline transactions. Furthermore, the measure of obviousness is not based solely on the teachings of the two references, but what these two references would have meant to one of ordinary skill in the art at the time the invention was made.

EXAMINER'S RESPONSE TO APPELLANT'S ARGUMENT 4:

The Applicant argues "the specific relationships for generating ratings as claimed in claims 4, 6 – 7 are not taught or suggested by Kloba or Tuzhilin". The Examiner respectfully disagrees.

As discussed above, the Tuzhilin and Kloba systems must be able to record all user activities, such as how much time the user spends on a particular web site, the number of times the user listened to a song, how often the user bought items. The combination would also generate rules based on such transaction activity by the user. The date/time would also have been recorded in instances such as the example given by Tuzhilin, e.g., "in Paris" or "evening." And, "[a] particular branch of beer or automobile" may include the size or flavor of the user. See Tuzhilin, column 11, lines

21-29. The reason a user may want to buy a particular item can be its size. Referring to Fig. 3 – 5, Tuzhilin teaches how to generate the dynamic profile construction procedure that includes individual rules (column 5 line 1 – column 10 line 45), and the Estimated Purchasing Need Module, which match these rules that include the types and time of items to be purchased, with the user's purchasing history (See column 11 line 47 – 53). Therefore, the Kloba/Tuzhilin combination discloses the rating or recommendation being established based on: (1) the "Number of interactions," which corresponds to the "number of times;" and (2) the "Date/time," which corresponds to "Evening."

Referring to Col. 11 lines 25 – 29, Tuzhilin teaches that its system can generate rules such as how "often [the user] buys perfumes in Paris." This clearly indicates that the system must be able to record the total number of user interactions with the item at a specific time in order to generate that the "user often buys perfume in Paris'"

Therefore, contrary to Appellant's assertion (see page 7 of Brief), the combination of Kloba and Tuzhilin disclose "implicit ratings based on a user interaction comprising an instance of a user causing the application to display or play the provide item to the user and duration of the display or play," as set forth above.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Nguyen, Cam-Linh
December 17, 2003

Conferees:

Metjahic, Safet
SPE – AU 2171

Amsbury, Wayne
Primary Examiner – AU 2171

John E Beck
Xerox Corporation
Xerox Square 20A
Rochester, NY 14644